

Chapter 3

Use with Section 2

REINFORCEMENT

● Aqueous Solutions

Write "true" in the blank if the statement is true. If the statement is false, replace the italicized word with a word that makes the statement true. Write this new word in the blank.

- _____ 1. In the water molecule, electrons are *equally* shared by hydrogen atoms and oxygen atoms.
- _____ 2. Solutions for which water is the solvent are called *aqueous* solutions.
- _____ 3. If electrons are shared *equally* between atoms that compose a molecule, that molecule is said to be polar.
- _____ 4. Water readily dissolves most *polar* compounds.
- _____ 5. Table salt, NaCl, is a(n) *molecular* compound.
- _____ 6. In a(n) *ionic* compound, one or more atoms loses electrons, and one or more atoms gains electrons.
- _____ 7. In solution, the charged regions of water molecules can pull a(n) *ionic* compound apart.
- _____ 8. Chemists say, "Like dissolves like." This means that dissolution tends to occur when the *solid* and the solute are similar in nature.
- _____ 9. Most oils tend to dissolve best in *nonpolar* solvents.
- _____ 10. A few oils, such as olive oil and safflower oil, mix with water because they are somewhat *nonpolar*.

Complete the following. Write your answers on the lines provided.

11. What does the word *soluble* mean? _____

12. How is the solubility of a substance usually described? _____

13. What is an unsaturated solution? _____

14. Name three ways in which you can increase the speed at which a solute dissolves.

15. What happens if you continue to add solute to a saturated solution? _____

16. Compare the terms *concentrated* and *dilute* with respect to solutions. _____

17. Can pressure affect the solubility of a substance in solution? Explain. _____

18. How does temperature affect the solubility of a solute in solvent? _____
